Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14.   (Canceled)

15. (Currently amended)   A computer-implemented method for determining ~~analyzing~~ business risk of a target business entity from qualitative event business information, comprising:

retrieving a plurality of articles each containing qualitative event information relevant to the target business entity, wherein the retrieved articles contain keywords and text patterns that are representative of events of interest for the target business entity and are within a reasonable proximity to the target business entity;

parsing each sentence within a paragraph of text from each one of the retrieved articles ~~an article~~ that contains keywords and text patterns into component parts of speech and grammar structure;

extracting event details and relationships between events and the target business entity from the component parts of speech and grammar structure;

generating a structured events record from the extracted event details and relationships;

retrieving a plurality of ~~comparing the structured events record to~~ templates of pattern events, wherein each template comprises a number and type of events that form a

pattern in an event category and temporal constraints that exist between the events;

using temporal based reasoning to identify <u>how well each of the</u> templates of pattern events ~~that~~ match the structured events record; and

generating a probability of risk measure based on <u>a</u> ~~the~~ degree of match between the identified templates of pattern events and the structured events record.

16. (Canceled)

17. (Original)   The method according to claim 15, wherein the extracting of event details and relationships between events and the target business entity comprises:

locating the target business entity and keywords that are representative of events of interest in each sentence;

identifying roles of the keywords in the sentences; and

determining relationships between events and the target business entity based on the roles of the keywords.

18. (Original)   The method according to claim 17, further comprising identifying sense and direction of the events in the sentences.

19. (Original)   The method according to claim 15, wherein the structured events record comprises an event category, event keywords within each sentence of an article, roles of the keywords within each sentence, relationships between the events and the target business entity and sense and direction of the events.

20. (Currently amended)   The method according to claim 15, wherein the using of temporal based reasoning to identify how well the templates of pattern events ~~that~~ match the structured events record comprises utilizing one or more techniques selected from the group consisting of: ~~at least one of~~ case-based reasoning, and a Bayesian belief network.

21. (Original)   The method according to claim 15, further comprising generating an alert when the probability of risk measure reaches a predetermined threshold.

22. (Currently amended)   A computer-implemented method for monitoring business risk of a target business entity using qualitative event business information, comprising:

   searching a plurality of natural language sources for articles mentioning the target business entity;

   retrieving a plurality of articles each containing qualitative event business information relevant to the target business entity, wherein the retrieved articles contain keywords and text patterns that are representative of events of interest for the target business entity and are within a reasonable proximity to the target business entity;

   determining whether any of the retrieved articles contain unanalyzed qualitative event business information;

   for the retrieved articles containing unanalyzed qualitative event business information, parsing each sentence within a paragraph of text from the retrieved article into component parts of speech and grammar structure;

   extracting event details and relationships between events and the target business entity from the component parts of speech and grammar structure;

   generating a structured events record from the extracted event details and relationships;

retrieving a plurality of ~~comparing the structured events record to~~ templates of pattern

events, wherein each template comprises a number and type of events that form a

pattern in an event category and temporal constraints that exist between the

events;

using temporal based reasoning to identify <u>how well each of the</u> templates of pattern

events ~~that~~ match the structured events record; and

generating a probability of risk measure based on <u>a</u> ~~the~~ degree of match between the

identified templates of pattern events and the structured events record.

23. (Original)   The method according to claim 22, wherein the extracting of event details and

relationships between events and the target business entity comprises:

locating the target business entity and keywords that are representative of events of

interest in each sentence;

identifying roles of the keywords in the sentences; and

determining relationships between events and the target business entity based on the roles

of the keywords.

24. (Original)   The method according to claim 22, wherein the structured events record

comprises an event category, event keywords within each sentence of an article, roles of

the keywords within each sentence, relationships between the events and the target

business entity and sense and direction of the events.

25. (Currently amended)   The method according to claim 22, wherein the using of temporal

based reasoning to identify <u>how well the</u> templates of pattern events ~~that~~ match the

structured events record comprises utilizing <u>one or more techniques selected from the</u> <u>group consisting of:</u> ~~at least one of~~ case-based reasoning<u>,</u> and a Bayesian belief network.

26. (Original)   The method according to claim 22, further comprising generating an alert when the probability of risk measure reaches a predetermined threshold.

27-43. (Canceled)

44. (Currently amended)   A system for analyzing business risk of a target business entity from qualitative event business information, comprising:

a text pattern database<u>, stored on a first computer storage system, that defines</u> **~~defining~~** a set of keywords and text patterns that are representative of events of interest;

a search component <u>running on a computer processor and</u> configured to search a plurality of natural language sources and retrieve a plurality of articles each containing keywords and text patterns defined in the text pattern database;

an extraction engine component <u>running on a computer processor and</u> configured to extract a structured events record from the plurality of articles, wherein the extraction engine component comprises a grammar parsing tool configured to receive paragraphs of text containing the keywords and text patterns from each of the plurality of <u>retrieved</u> articles and parse each sentence within the paragraphs into component parts of speech and grammar structure; and a semantic analysis tool configured to extract event details and relationships between events and the target business entity from the component parts of speech and grammar structure;

a pattern events database<u>, stored on a second computer storage system,</u> that comprises templates of pattern events, wherein each template comprises a number and type of

events that form a pattern in an event category and temporal constraints that exist

between the events; and

a pattern analyzer <u>running on a computer processor and</u> configured to use temporal reasoning to compare the structured events record to the templates of pattern events and identify <u>how well each of the</u> templates of pattern events ~~that~~ match the structured events record.

45. (Original)   The system according to claim 44, further comprising a proximity checking component configured to ascertain whether the keywords and text patterns in the retrieved articles are within a reasonable proximity to the target business entity.

46. (Original)   The system according to claim 45, wherein the proximity checking component is configured to remove articles that do not have keywords or text patterns within a reasonable proximity to the target business entity.

47. (Original)   The system according to claim 45, wherein the proximity checking component is configured to use a plurality of proximity rules to identify whether the keywords and text patterns are likely related to the target business entity.

48. (Original)   The system according to claim 44, wherein the semantic analysis tool is configured to locate the target business entity and keywords in each sentence, identify roles of the keywords in the sentences, and determine relationships between events and the target business entity based on the roles of the keywords.

49. (Original)   The system according to claim 48, wherein the semantic analysis tool is configured to identify sense and direction of the events.

50. (Original)   The system according to claim 44, wherein the structured events record comprises an event category, event keywords within each sentence of an article, roles of

the keywords within each sentence, relationships between the events and the target business entity and sense and direction of the events.

51. (Original)   The system according to claim 44, wherein the pattern analyzer is configured to generate a probability of risk measure based on the degree of match between the identified templates of pattern events and the structured events record.

52. (Original)   The system according to claim 44, wherein the pattern analyzer utilizes at least one of case-based reasoning and a Bayesian belief network.

53. (Original)   The system according to claim 44, further comprising an alert component configured to generate an alert when the pattern analyzer determines that the risk of the target business entity has reached a predetermined threshold.

54-67. (Canceled)

68. (Currently amended)   A computer-readable medium <u>having tangibly stored thereon a computer program</u> ~~storing computer instructions~~ for ~~instructing a computer system to analyze~~ <u>determining</u> business risk of a target business entity from qualitative event business information, the computer <u>program comprising a routine set of instructions which when executed by a computer machine cause the computer machine to perform the steps of</u> ~~instructions comprising~~:

retrieving a plurality of articles each containing qualitative event information relevant to the target business entity, wherein the retrieved articles contain keywords and text patterns that are representative of events of interest for the target business entity and are within a reasonable proximity to the target business entity;

parsing each sentence within a paragraph of text from <u>each of the retrieved articles</u> ~~an article~~ that contains keywords and text patterns into component parts of speech and grammar structure;

extracting event details and relationships between events and the target business entity from the component parts of speech and grammar structure;

generating a structured events record from the extracted event details and relationships;

retrieving a plurality of ~~comparing the structured events record to~~ templates of pattern events, wherein each template comprises a number and type of events that form a pattern in an event category and temporal constraints that exist between the events;

using temporal based reasoning to identify <u>how well each of the</u> templates of pattern events ~~that~~ match the structured events record; and

generating a probability of risk measure based on <u>a</u> ~~the~~ degree of match between the identified templates of pattern events and the structured events record.

69. (Canceled)

70. (Original)   The computer-readable medium according to claim 68, wherein the extracting of event details and relationships between events and the target business entity comprises instructions for:

locating the target business entity and keywords that are representative of events of interest in each sentence;

identifying roles of the keywords in the sentences; and

determining relationships between events and the target business entity based on the roles of the keywords.

71. (Original)   The computer-readable medium according to claim 70, further comprising instructions for identifying sense and direction of the events in the sentence.

72. (Original)   The computer-readable medium according to claim 68, wherein the structured events record comprises an event category, event keywords within each sentence of an article, roles of the keywords within each sentence, relationships between the events and the target business entity and sense and direction of the events.

73. (Currently amended)   The computer-readable medium (14) according to claim 68, wherein the using of temporal based reasoning to identify templates of pattern events that match the structured events record comprises instructions for utilizing <u>one or more techniques selected from the group consisting of:</u> ~~at least one of~~ case-based reasoning<u>,</u> and a Bayesian belief network.

74. (Original) The computer-readable medium (14) according to claim 68, further comprising instructions for generating an alert when the probability of risk measure reaches a predetermined threshold.